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1.1 Technical Mapping Advisory Council Creation and Composition

The Technical Mapping Advisory Council (the Council) was created by Congress by the National Flood Insurance Reform Act of 1994 (NFIRA). This report complies with the requirement of NFIRA that the Council submit a report annually to FEMA's Director.

NFIRA mandated that the Council consist of a designee of the Director and ten additional members appointed by the Director or his designee. The membership must include:

- the Under Secretary of Commerce for Oceans and Atmosphere (or his or her designee);
- a member of recognized surveying and mapping professional associations and organizations;
- a member of recognized professional engineering associations and organizations;
- a member of recognized professional associations or organizations representing flood hazard determination firms;
- a representative of the U.S. Geological Survey;
- a representation of state geological survey programs;
- a representative of state national flood insurance coordination offices;
- a representative of a regulated lending institution;
- a representative of the Federal Home Loan Mortgage Corporation (now named Freddie Mac); and
- a representative of the Federal National Mortgage Association (now named Fannie Mae).

The Director of FEMA appointed Michael K. Buckley, P.E., as the Designated Federal Officer for, and the FEMA representative on, the Council.

Peggy Bowker

Ms. Bowker is a member of the National Flood Determination Association (NFDA), and represents that professional group on the Council. She is a former chair of the Association and was instrumental in its founding and in the development of Association policy. She is president

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of Flood Insurance Services, Inc., a flood-zone determination company; and Nimbus Engineers, a civil engineering consulting firm specializing in hydrology, hydraulics, and other aspects of flood control and drainage. She is a registered professional engineer in the states of Nevada and Arizona. During her career she has served as a local floodplain manager, a FEMA disaster assistance employee, a flood insurance study contractor, and a consultant for a variety of public and private interests in flood-control planning and design.

Michael K. Buckley

Mr. Buckley has over 24 years of experience and involvement with the National Flood Insurance Program (NFIP), the last 19 of which have been with FEMA. He serves as Director of the Technical Services Division, the component of the FEMA Mitigation Directorate responsible for a broad range of hazard mapping and studies to support mitigation activities.

Charles Challstrom

Director, National Geodetic Survey, National Oceanic and Atmospheric Administration (NOAA), and chair of the Global Positioning System (GPS) Interagency Advisory Council. Mr. Challstrom earned a Master of Science in Geodetic Science, and has 26 years of experience as a geodesist. He is active in various professional surveying organizations, including the American Congress on Surveying and Mapping and the International Federation of Surveyors, and has served as a municipal government official for more than 15 years.

Kari Craun

Assistant Chief of the Mid-Continent Mapping Center, National Mapping Division, U.S. Geological Survey (USGS). Ms. Craun has worked in all aspects of mapping, including analog and digital map production, research, standards, and cartographic systems development. She has an M.S. in Photogrammetry from Purdue University and is an active member of several mapping societies.

Kevin R. Hickey

Analyst for Rehabilitation Lending in the Mortgage and Lender Standards Department in the Credit Policy Division at Fannie Mae. Mr. Hickey is responsible for review and analysis of credit risks for lender transactions and provides guidance on proposed new products. Mr. Hickey was appointed to the Council in 1997 and will coordinate closely with all applicable areas of Fannie Mae to assist in furthering the Council's objectives.

Donald Hull

Honorary member and past president of Association of American State Geologists (AASG); registered professional geologist; served for 21 years as director of the state of Oregon Department of Geology & Mineral Industries; chaired the 1998 Oregon Legislative Task Force on

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Flood Control; currently Executive Director of Partners for Loss Prevention, a private non-profit corporation dedicated to reducing the risk of natural hazards.

Brian Hyde

Member and chair, Mapping and Engineering Standards Committee, Association of State Floodplain Managers (ASFPM), employed as state National Flood Insurance Program Coordinator for the Colorado Water Conservation Board.

Wendy Lathrop

Member, American Congress on Surveying and Mapping (ACSM) that represents professional surveying and mapping associations and organizations. Ms. Lathrop is licensed as a professional land surveyor in four states and is also a professional planner. She has served as a president of state and national surveying organizations, and initiated interaction between ACSM and FEMA in 1992 to address NFIP mapping issues.

Albert LeQuang

Mr. LeQuang is Manager of Insurance Standards and Disaster Mitigation in the Mortgage Credit Policy Department of Freddie Mac.

Michael Moyer

Representing regulated lending institutions, Mr. Moyer is president of Banc of America Insurance Services, Inc.; president of the Advisory Board of the National Lenders' Insurance Council; Lending Industry Representative Multihazard Mitigation Council's Board of Directors; and trustee for the Association of State Floodplain Managers Foundation. He is also responsible for managing the flood-zone determination contracts for Bank of America.

Mark Riebau

Nominated by the American Society of Civil Engineers (ASCE), Mr. Riebau represents professional engineering associations and organizations. He is licensed as a Professional Engineer in Wisconsin, Minnesota, Michigan and Iowa, and a Registered Land Surveyor in Wisconsin, and has practiced since 1969.

Mr. Riebau has been actively involved in the National Flood Insurance Program and the development of Flood Insurance Rate Maps since 1977 and served as the chair of ASFPM's Mapping and Engineering Standards Committee for six years.

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1.2 Charter and Duties

The Charter for the Council (see Appendix 7.1) was based on the provisions of NFIRA. As required by Federal Advisory Committee regulations, it was filed with House and Senate oversight committees, the General Services Administration, and the Library of Congress; and was formally adopted by the Council. The duties and objectives of the Council as specified in its Charter are to:

- Evaluate the production, distribution and use of Federal Insurance Rate Maps (FIRMs) and other mapping products prepared by FEMA in support of the NFIP and to make recommendations to the Director for the improvement of these products.
- Make recommendations to the Director regarding cost-effective improvements in the accuracy, quality, utility, and distribution of FIRMs and other mapping products; and standards and guidelines for use in preparing and revising FIRMs and other mapping products.
- Submit an annual report to the Director containing a description of the Council's activities; an evaluation of the status and performance of FEMA's mapping products and activities to revise and update these products; and a summary of the Council's recommendations.

1.3 Acknowledgments

In its work over the past four years, the Council has been privileged to have the advice and counsel of FEMA staff members, Map Coordination Contractors Dewberry & Davis and Michael Baker Jr., Inc., and other experts who have attended and participated in meetings. In particular, the Council acknowledges the assistance it has received from its Technical Advisors: Bill DeGroot of the National Association of Flood and Stormwater Management Agencies, Ken Zwickl of the U.S. Army Corps of Engineers, Maureen Woosnam of the Flood Insurance Servicing Companies Association of America, and its newest advisor, Dennis W. Lawlor with the National Emergency Management Association.

1.4 Council's Goals

Members of the Council articulated these constituent and Council goals during the initial meeting in May 1996 as reported in the Council's first Annual Report on January 31, 1997. Progress toward accomplishing these goals is reported in Chapter 6.0.

General

1. Ensure that Flood Insurance Rate Maps (FIRMs) reflect flood sources adequately and accurately, and include all current flood data that meet FEMA standards.

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2. Increase reliability of data sources; and increase accuracy, consistency, security, transportability, and sharing of data.
3. Evaluate the need for including multiple hazards on NFIP maps.

Map Preparation

4. Improve the study and review processes.
5. Identify a U.S. base map standard that can be adapted for a variety of NFIP uses by the addition of overlays depicting area-specific information.
6. Encourage non-federal entities to improve maps.
7. Actively promote partnerships with state and local governments to improve FIRMs.

Map Determinations

8. Improve flood-zone determinations by increasing accuracy, adding details, and using digitized data.
9. Make accurate, automated determinations possible (ease of use, data integrity at issue).

Map Distribution and Distribution of Related Information

10. Improve the distribution systems for NFIP maps, Letters of Map Amendment, and Letters of Map Revision to ensure that current data are made available to local officials, subscribers, and other users.

Communication and Public Education

11. Improve activities to educate the public and other users of flood maps, and communicate with them regarding the use of the data in the NFIP.
12. Improve communication among floodplain managers, lenders, investors, FEMA and its contractors, local communities, states, partners, and other significant stakeholders that have an impact on the national flood effort (for better floodplain management).

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